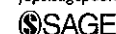


Exhibit 3

Testing Accommodations Under the Amended Americans With Disabilities Act: The Voice of Empirical Research

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Abstract

The 2008 amendments to the Americans With Disabilities Act have now been followed by implementation guidelines from the Department of Justice. These guidelines take strong positions on how testing entities should review requests for testing accommodations from examinees with disabilities. In this article, themes from the guidelines are evaluated against the findings of recent empirical research, highlighting major discrepancies. In general, the Department of Justice places more trust in the accommodations expertise of K–12 schools, clinical professionals, and testing entities than is warranted by empirical research. This trust is likely to lead to excessive recommendation of testing accommodations, even when they threaten a test's validity. Several implications of these findings for practice and policy are discussed.

Keywords

assessment, accommodations, learning disabilities

On January 1, 2009, the ADA Amendments Act (ADAAA) took effect. The ADAAA explicitly criticized court rulings that had interpreted the 1990 Americans With Disabilities Act (ADA) in a narrow way, making clear that Congress had instead intended the act to have “broad coverage.” In a variety of specific ways, the ADAAA expanded coverage, restoring the original intent of the ADA (Rozalski, Katsiyannis, Ryan, Collins, & Stewart, 2010).

The Department of Justice (DOJ) is authorized to develop guidelines for the implementation and enforcement of the ADAAA, and on March 15, 2011, new federal regulations on disability discrimination from the DOJ's Civil Rights Division became effective. In this article, I examine a section of these regulations (Examinations and Courses, 2010), as well as their accompanying narrative “guidance” document (Appendix A, 2010), focusing on testing accommodations given to individuals in postsecondary settings (employment, higher education, and certification/licensure contexts). Briefly, the aim is to consider the regulations and accompanying guidance against recent empirical research, to determine what evidence supports or refutes claims made by the regulations.

Testing accommodations are among the modifications that individuals with disabilities may request to ensure that they can access the same institutions as other citizens. In particular, testing accommodations can allow individuals with disabilities to demonstrate their skills by altering an unimportant aspect of the test administration procedure (Thurlow, Thompson, & Lazarus, 2006). For instance, a

college student who has a diagnosis of attention-deficit hyperactivity disorder (ADHD) and is extremely distractible might be permitted to take his or her course examinations in a private room, rather than in the classroom with the rest of his or her classmates. Other common testing accommodations include extra test time, a reader to read the test items to the examinee, and a scribe to record the examinee's responses. When they are used properly, testing accommodations lead to more valid test scores for examinees with disabilities; however, if proffered carelessly, they may give these examinees an unfair advantage, yielding test scores that cannot be fairly compared with scores obtained under standard test administration conditions (Lerner, 2004; Lovett, 2010; Phillips, 1994).

The DOJ's federal regulations themselves, which have the force of law, make three points with regard to testing accommodations (all quotations in this paragraph are from Examinations and Courses, 2010). First, the regulations require that testing entities' requests for disability documentation be “reasonable and limited to the need for” accommodations. Second, they require that when testing entities consider applicants' requests for accommodations, the entities give “considerable weight to documentation of

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past” accommodations, including those from the individualized education programs (IEPs) used in special education. Finally, they require that testing entities respond “in a timely manner to requests” for accommodations.

The DOJ’s guidance document fleshes out these regulations considerably, at times adding additional directives (all quotations in this section are from Appendix A, 2010). One theme in the guidance is a high degree of trust in the diagnoses and recommendations made by applicants’ clinical evaluators. For instance, the guidance directs that

[w]hen testing entities receive documentation provided by a qualified professional who has made an individualized assessment of an applicant that supports the need for the modification, accommodation, or aid requested, they shall generally accept such documentation and provide the accommodation.

The guidance further emphasizes trust in these professionals, averring that “[r]eports from experts who have personal familiarity with the candidate should take precedence over those from, for example, reviewers for testing agencies, who have never personally met the candidate or conducted the requisite assessments for diagnosis and treatment.” Later, the guidance reiterates this trust:

[W]hen an applicant’s documentation demonstrates a consistent history of a diagnosis of a disability, and is prepared by a qualified professional who has made an individualized evaluation of the applicant, there is little need for further inquiry into the nature of the disability and generally testing entities should grant the requested modification, accommodation, or aid.

A second theme in the guidance is that if accommodations were given in the past, they should generally continue to be given. Specifically, the guidance states that

an applicant’s past use of a particular modification, accommodation, or auxiliary aid or service in a similar testing setting or pursuant to an IEP or Section 504 plan provides critical information in determining those examination modifications that would be applicable in a given circumstance.

The guidance goes on to clarify that past accommodations in any setting are relevant: “[A] history of test accommodations in secondary schools or in post-secondary institutions . . . is as useful and instructive for determining whether a specific accommodation is required as accommodations provided in standardized testing situations.”

The two themes in the guidance are united by their trust in the decisions of clinical evaluators as well as prior

testing entities (e.g., K–12 schools, colleges/universities, or standardized testing agencies) to make accommodation decisions. The decisions made by K–12 schools are seen as particularly trustworthy, as the guidance makes clear: “Accommodations provided in both these circumstances [IEPs and Section 504 Plans] are typically granted in the context of individual consideration of a student’s needs by a team of qualified and experienced professionals.” The guidance expresses concern that “[e]ven though these accommodations decisions form a common sense and logical basis for testing entities to rely on, they are often discounted and ignored by testing entities.”

In this article, I argue that empirical research does not generally support the trust that these regulations suggest testing entities should place in judgments by diagnosticians and past testing entities. The research leads instead to five points that challenge the regulations and are discussed in more detail below:

1. IEP teams do not make reliable and valid determinations of disability status in the relevant legal (ADAAA) sense.
2. The process used by IEP teams to make decisions about testing accommodations emphasizes issues of comfort and potential benefit, rather than equal access.
3. Evaluations by private diagnosticians also do not reliably address relevant ADAAA issues when making accommodation recommendations.
4. Accommodations are often granted by educational institutions and test agencies despite a lack of supportive evidence, meaning that prior eligibility for accommodations is only weak evidence of genuine need.
5. It is possible to successfully feign common disorders that lead to the provision of testing accommodations, and some degree of feigning occurs in a substantial number of cases.

Importantly, the research reviewed here concerns the most common disability conditions that lead to testing accommodations: learning and psychiatric problems. Certainly, there are other important disability conditions, but they are far less common in absolute prevalence (Heward, 2012), especially in testing accommodation requests in postsecondary settings (U.S. Government Accountability Office, 2011). Rarer conditions differ from learning and psychiatric problems in ways that affect the appropriateness of the ADAAA guidelines. Indeed, when applied to sensory and physical disabilities, the guidelines may well be appropriate but not, as I discuss, when applied to the most common disability conditions.

IEP Teams' Expertise in Disability Determination

Although a disability label cannot, by itself, determine a student's testing accommodation needs, being identified with a disability condition is typically a precondition for accommodation eligibility (whether through the IEP or Section 504 process). Therefore, trust in accommodation decisions made by K–12 special education teams rests in part on trust in their disability determinations.

Unfortunately, the extant research evidence undermines this trust, suggesting instead that IEP teams' judgments of disability status are often neither reliable nor valid, especially where the highest incidence disability conditions are concerned. With regard to learning disabilities, by far the most common special education classification, studies dating back to the 1980s have found that IEP teams' decisions to identify learning disabilities reflect a capricious process rather than careful adherence to standardized diagnostic rules (for a review of relevant research, see MacMillan & Siperstein, 2002). In early studies (e.g., Algozzine & Ysseldyke, 1982; Shepard, Smith, & Vojir, 1983), researchers examined files of children who were evaluated by their school districts and either diagnosed or not diagnosed as having a learning disability. In these studies, the researchers found that "learning disability" was used as a catch-all category for students with a variety of problems and that many students *not* identified with a learning disability had achievement levels similar to students who had been identified. In short, it was difficult for researchers to determine why some students and not others had been assigned the learning disability label. Moreover, more recent research (e.g., MacMillan, Gresham, & Bocian, 1998; Peterson & Shinn, 2002) has found that schools fail to follow their own states' regulations for identifying students with learning disabilities.

There is also a growing body of work on how ADHD is diagnosed. ADHD is often diagnosed by psychologists, pediatricians, psychiatrists, neurologists, and other professionals, yielding even more variability in assessment practices. As school-based teams typically rely on diagnoses made by these outside professionals, variability in these professionals' assessment practices affects the reliability of IEP decisions. Handler and DuPaul (2005) compared the ADHD assessment practices of 230 psychologists in three specialties (clinical, counseling, and school psychology) across three work settings (a university-based assessment program, an outpatient clinic/private practice, and a K–12 school). Overall, only 15.3% of respondents were deemed by the investigators to use best practice assessment methods; even after the investigators made their coding criteria less stringent (by not requiring psychologists to observe children in a natural setting), only 33.3% of respondents

were deemed to use best practices. Similarly, a survey by Koonce (2007) found that even within a single profession (school psychology), there was much disagreement about methods for assessing ADHD.

Together, these empirical studies of learning disability and ADHD diagnoses show two consistent findings. First, considerable variability exists in how common disability conditions are assessed. Second, disability conditions are often diagnosed when students do not meet official criteria for a condition or when best practice identification strategies have not been used. When assessment techniques are so variable and identification practices so often fail to match official criteria, prior diagnoses cannot even be taken as evidence of presence of a condition, let alone as evidence that an individual meets ADAAA criteria for a person with a disability.

K–12 Accommodation Decision Making: The Centrality of Benefit and Comfort

The DOJ regulations' trust in accommodation decisions by IEP teams assumes that these decisions are based on the issues and concerns that would apply under ADAAA, namely, what reasonable accommodations are necessary to allow an individual with a disability to have access to the exam equal to that of other examinees? However, the available research suggests that IEP teams instead often view accommodations as a way to increase students' self-concepts and comfort during exams or as a way to simply raise students' scores. In a pioneering study, Rickey (2005) observed IEP team meetings at which testing accommodation decisions were made and interviewed a variety of participants (students, parents, administrators, general and special education teachers) about the decisions. She did this at three middle schools to determine whether findings at one school would replicate at others. Rickey found that the climate of accommodation decision making in K–12 settings does not emphasize equal access, in the sense of fairly measuring all students' skills. Instead, as she summarized,

At [School 1] the only reason stated, and at [Schools 2 & 3] the primary reason stated, for providing testing accommodations at all was not to more accurately reflect skill level, but rather was intended to reduce the stress and frustration experienced by the student during testing. (Rickey, 2005, p. 124)

Rickey's (2005) study suggested that initial testing accommodation decisions in K–12 settings *do not* reflect concerns akin to those in ADAAA. Instead, the reasons for accommodations use included increasing students'

perceptions of their performance (e.g., a teacher reported giving “enough accommodations so they [students] can feel successful”), ensuring high student performance (e.g., a teacher reported that “we need to make it so they [students] can be successful or at least do as much as we can within the law to help them be successful”), and even increasing self-esteem (e.g., a parent reporting that testing accommodations would give her son “a better chance of feeling better about himself”).

K–12 accommodations, then, may often be given for reasons that are irrelevant to postsecondary accommodations eligibility. More generally, the climate of K–12 special education decision making is vastly different from the ADAAA world of disability discrimination protection. For instance, K–12 students with disabilities can receive *grading adaptations*, where the standards for judging their work and assigning course grades are different. In a recent tutorial for teachers, Silva, Munk, and Bursuck (2005) described grading adaptations including modifying the weighting of different assignments and exams when calculating a grade, and even modifying a grading scale (e.g., lowering the cut-off for a “B” grade from 85% to 75%). Silva et al. suggested that the questions to be asked when considering grading adaptations include “Could the adaptation motivate the student to work hard?” and “Could the adaptation result in the student receiving a higher grade than in past marking periods?” (p. 94). It should not be surprising, then, that testing accommodations such as additional time are viewed in this setting as minor changes to be proffered liberally, so long as they would make the testing experience less unpleasant, motivate the student, or increase his or her scores.

Although Rickey’s (2005) study should be replicated at other levels of education (elementary and high schools) and in other parts of the country, its findings, along with related work about the nature of the special education decision-making climate, place the evidentiary burden on those who claim that K–12 testing accommodations are provided for the same reason that they are provided by testing entities in postsecondary settings, to allow equal access to exams. The extant evidence suggests otherwise.

It may seem surprising that K–12 accommodation decisions are based on issues so far from those emphasized by disability discrimination law. Considering the regulatory environment and incentive structure present in K–12 public schools helps to make sense of this. With regard to the regulatory environment, although ADAAA applies in these settings, so do special education laws, which routinely lead to program changes (such as grading adaptations) that are far more substantial than what would be required as reasonable accommodations under antidiscrimination law (Latham, Latham, & Mandlawitz, 2008). With regard to the incentive structure, many high-stakes exams taken in K–12 schools have financial implications for the teacher, school, and school district, leading to goals of increasing students’

participation in testing programs and increasing their test scores (Telfer, 2011), in part by providing any available accommodations.

Private Diagnosticians’ Expertise in Accommodation Cases

So far I have considered disability determinations and testing accommodation decisions that were made prior to adulthood, in which the ADAAA regulations appear to place an unwarranted level of trust. But many applicants who request testing accommodations lack a lengthy history of disability diagnosis or accommodations eligibility. In these cases, the DOJ’s regulations and guidance still suggest that if a qualified professional evaluates the applicant, diagnoses a disability condition, and recommends testing accommodations, testing entities should generally accede to the professional’s judgment. Unfortunately, research from the past decade suggests that private evaluators often ignore relevant ADAAA issues.

Direct evidence on this point was obtained in a study by Gordon, Lewandowski, Murphy, and Dempsey (2002), who surveyed 147 clinicians who had conducted evaluations used to request accommodations on a professional school admissions test. These clinicians answered a set of true/false questions about the ADA and its implications for disability documentation requirements and accommodations in the context of higher education. Despite the true/false format of the survey, which may have led to overestimations of respondents’ knowledge, many clinicians gave incorrect answers. For instance, more than one third of respondents indicated that the ADA is violated when an agency does not provide accommodations “guaranteeing that the individual with a disability will perform at his or her best.” The same proportion of respondents indicated that under the ADA, an individual with a disability “has to show impairment when compared to other students in a similar college or professional program,” rather than compared with the general population. More than half of the respondents indicated that under the ADA, an individual with an average reading score would qualify as having a reading disability if the individual’s IQ was well above the average. Even more problematic beliefs were endorsed by smaller but still substantial proportions of respondents; for instance, 29% indicated that when a client is seeking accommodations, “the purpose of a clinical evaluation . . . is to help secure those accommodations.” Overall, Gordon and colleagues expressed concern about these and other views, and although the survey was conducted before the ADA amendments, the amendments have not changed the issues mentioned here.

Another way to gauge clinicians’ competence to make disability determinations involves actually inspecting their reports. In a recent study, Joy, Julius, Akter, and Baron

(2010) reviewed documentation from 50 applicants who requested accommodations on the medical licensure exam for osteopathic physicians (the Comprehensive Osteopathic Medical Licensing Examination [COMLEX]) due to ADHD. Typically, these files include evaluation reports from psychologists, psychiatrists, or other health professionals, as well as any additional supporting evidence of ADHD (e.g., teacher comments from elementary school). Four physicians with expertise in ADHD reviewed the applicants' files independently, and they showed almost perfect interrater reliability in their coding of whether each file showed sufficient evidence of each of the five official diagnostic criteria for ADHD found in the current edition of the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000). Remarkably, of 50 files, only 7 included sufficient evidence of all five ADHD criteria. Moreover, more than 40% of files lacked sufficient evidence of clinical impairment in real-world functioning (the *DSM* criterion with the most relevance to ADA determinations). In other words, diagnosticians were neither applying accepted (*DSM*) criteria when making this diagnosis nor ensuring that their clients met ADA standards for a disability.

Sparks and Lovett (2009) conducted a similar study, inspecting 378 files of university students who had submitted documentation of a learning disability diagnosis to qualify for academic accommodations. These investigators applied five different sets of objective criteria for a learning disability diagnosis, to see which, if any, of the criteria sets students would meet. Sparks and Lovett found that more than half of the students failed to meet *any* of the sets of official criteria for a learning disability. Two of the five sets of criteria required that the individual be impaired in academic skills relative to the general population (the relevant ADA/ADAAA standard); very few students (6.3% and 6.9%) met these sets of criteria, even though all the students had already been diagnosed as having a learning disability.

The findings that individuals in these studies are especially unlikely to meet criteria that require functional impairment may be due to clinicians' focus on symptoms rather than impairment. Many clinicians appear to assume that referral to a clinical setting is itself sufficient evidence of impairment, and so they focus their assessment on symptoms. Some symptoms may themselves indicate psychopathology (e.g., recurrent auditory hallucinations), but the symptoms associated with disorders such as ADHD and learning disabilities are common in the general population (e.g., Lewandowski, Lovett, Coddington, & Gordon, 2008). More generally, the relationship between symptoms and impairment is modest in many areas of psychopathology (Lewandowski, Lovett, & Gordon, 2009; Rapee, Bögels, van der Sluis, Craske, & Ollendick, 2012), yet clinicians rarely assess impairment using formal measures or objective evidence. Together, the studies reviewed in this section

suggest that many clinicians neither understand legal requirements for disability determination nor make accommodation recommendations based on relevant legal standards.

The (Un)Informativeness of Past Accommodations

Evidence on the first three points shows that clinicians and IEP teams often make diagnoses that do not track the legal notion of disability and that the special education climate in K–12 settings is conducive to the provision of unnecessary accommodations. The fourth, related, point is that accommodations have often already been given to students based on these questionable diagnoses and decision-making practices, keeping students' prior accommodations from being especially useful information. The most direct evidence on this point comes from a recent study by Madaus, Banerjee, and Hamblet (2010). These investigators surveyed officials from disability service offices at 183 postsecondary institutions, asking the officials about what documentation was needed for a student to qualify for accommodations under a learning disability diagnosis. The institutions varied widely in their requirements. Only 40% of 2-year schools and 53.7% of 4-year schools required current measures of academic achievement, which is typically core evidence of a learning disability. Only about 10% of schools required a copy of an IEP or related documentation showing receipt of school-based services for a learning disability. Perhaps most remarkably, some schools did not even require a formal diagnosis of a learning disability (although approximately 10% of schools replied that they "preferred" a clear diagnosis).

When "prior accommodations" include those given in the K–12 arena, there is even more reason for concern. For instance, research has found that although classroom teachers' recommendations are likely to be given considerable weight when IEP teams make accommodations decisions, teachers often hold inconsistent and inaccurate understandings of testing accommodations. In the first study to examine this issue, Siskind (1993) asked 60 South Carolina teachers (43 of whom were special education teachers) to complete a questionnaire about which of 51 accommodations were permitted on state exams. Out of a possible score of 51, the teachers' mean score was 28.52 (56% correct), with no significant difference between special and general education teachers. As Siskind bluntly concluded, "The typical teacher surveyed would have received a failing grade if the survey had been scored as a test" (Siskind, 1993, p. 154). Similar results were found in a later study by Hollenbeck, Tindal, and Almond (1998).

Research has also found that teachers tend to overrecommend accommodations. Fuchs and her colleagues have studied this phenomenon by comparing teachers' judgments about accommodations with a standardized decision-making

procedure. The standardized procedure examines whether a student with a disability shows more benefit from accommodations than a research sample of nondisabled students did, because it is generally agreed that for a testing accommodation to be appropriate, students with disabilities should benefit more than nondisabled peers (Sireci, Scarpatti, & Li, 2005). In one study (Fuchs, Fuchs, Eaton, Hamlett, Binkley, et al., 2000), the researchers administered reading tests (both with and without various accommodations) to fourth and fifth graders with and without learning disabilities; the researchers also asked the students' teachers which accommodations would be appropriate for each individual student. The researchers found that teachers' recommended accommodations far more often (73% of the time) than the standardized procedure showed the accommodations to be appropriate (41% of the time). In addition, students whose teachers recommended accommodations for them did not benefit from the accommodations more than students whose teachers recommended against accommodations. Similar results were found in a second study (Fuchs, Fuchs, Eaton, Hamlett, & Karns, 2000) in which math tests rather than reading tests were used. Taken together, the two studies suggest that teachers' recommendations for accommodations are not only excessive but also arbitrary, failing to accurately discriminate between students who need the accommodations and those who do not.

Finally, a recent study by Byrnes (2008) found that teachers may not even be able to *implement* testing accommodations properly, casting doubt on precisely what accommodations students have accessed in the past. Byrnes asked 45 teachers (including 12 special education teachers) in a suburban school district in New England for their interpretations of extended time and dictated response (scribe) accommodations, common accommodations seen on students' IEPs (e.g., Bolt & Thurlow, 2004). Byrnes found considerable variability in teachers' interpretations of the accommodations; only 52% of the general education teachers and 75% of the special education teachers interpreted "extended time" to even refer to tests (as opposed to class work or homework), 24% of the general education teachers interpreted it to mean unlimited time, and certain teachers interpreted it to include separate room accommodations or to have various restrictions. Results were similar for the dictated response accommodations, which teachers variously interpreted to mean verbatim recording of students' speech, access to a computer to type responses, or even use of another student to write down the responses of the identified student with a disability. It seems that common accommodations are stated in ambiguous ways by IEP teams, allowing for tremendous variability in interpretation and implementation by classroom teachers and other staff. Taken together, these studies suggest that a history of accommodations eligibility or usage, especially in K–12 settings, is *not* strong evidence for needing accommodations presently.

The Incentive of Accommodations and the Threat of Malingering

I finish by considering empirical work on a phenomenon that undermines the trust that suffuses the entire accommodations process recommended by the ADAAA regulations. I refer to the feigning or exaggerating of disability symptoms in an effort to obtain accommodations and other benefits. Just one decade ago, there was very little research on this phenomenon, allowing Shaywitz (2003) to pose the question, "Do people fake dyslexia just to get the 'perks' associated with it?" and then confidently dismiss the hypothesis as "an insidious, unfounded, and malicious rumor" (pp. 337–338). However, at present, there is a sizable empirical literature on the tendency to feign or exaggerate symptoms of disorders that often lead to testing accommodations: learning disabilities and ADHD.

Two facts emerge clearly from the malingering literature. First, even with minimal knowledge, it is possible for motivated individuals to successfully feign learning disabilities and ADHD. ADHD is the easier of the two cases to discuss (and to feign), because in adulthood, the primary measure used by evaluators is the client's reports of ADHD symptoms. Jachimowicz and Geiselman (2004) gave a list of the official ADHD symptoms (readily available on the Internet) to 80 university students who had never been diagnosed with ADHD. Each of the students then completed one of four commonly used ADHD symptom rating scales "while pretending to be affected with the disorder" (Jachimowicz & Geiselman, 2004, p. 13). The proportion of students whose scores were above the cutoff for ADHD symptoms ranged from 65% to 95%, depending on the scale that they completed. Fisher and Watkins (2008) replicated and extended these results with a larger sample (189 university students) and two other measures of ADHD symptoms.

Research has also shown successful feigning of learning disabilities. Harrison, Edwards, and Parker (2008) gave 125 university students a battery of cognitive and academic measures designed to detect dyslexia; some were instructed to feign the condition, whereas others were asked to put forth their best effort on the tests. The students' test scores were compared with the scores of 28 students with validated diagnoses of dyslexia. Harrison and her colleagues found that on a variety of measures, the students asked to feign dyslexia performed at least as poorly as the students who actually had dyslexia. They concluded that "scores on reading and processing tests alone are not sufficient to determine whether or not a student genuinely suffers from dyslexia, and such tests are vulnerable to the effects of effort and motivation" (Harrison, Edwards, & Parker, 2008, p. 240).

Of course, just because it is possible to successfully feign disorders does not mean that clients do so often, if at all. Unfortunately, recent research has repeatedly found that

a substantial number of clients do exaggerate their symptoms in a variety of real-world settings; this is the second fact to emerge consistently in the empirical literature. This research generally uses “effort tests” that appear difficult to clients but are actually quite easy, such that even individuals with moderate brain damage or severe learning disabilities are able to perform relatively well on them. If a client fails any of these measures, it suggests that the client is not putting forth sufficient effort or is actually feigning problems. The first key study using effort tests in this arena was conducted by Sullivan, May, and Galbally (2007), who included an effort test (the *Word Memory Test*) in evaluations conducted at a college-affiliated assessment clinic. Of 66 students who were each evaluated for suspected ADHD, a learning disability, or both, almost one quarter (22.4%) failed at least one part of the effort test. Of the 21 students who were only assessed for ADHD, almost half (47.6%) failed at least one part, suggesting that symptom exaggeration was quite common.

More recent studies have replicated these findings; somewhat lower rates of symptom exaggeration are sometimes found, but even the lowest estimates still suggest that a significant number of clients are not performing honestly or putting forth their full effort when being assessed for disorders that may allow access to testing accommodations (Jasinski & Ranseen, 2011). When we consider findings such as these, along with official guidelines recommending formal assessment of motivation and effort (Board of Directors, 2007; Bush et al., 2005), it is surprising that evaluations done to support testing accommodation requests rarely address issues of motivation and effort adequately. Indeed, it is rare to see formal tests of effort used, even when the evaluation report openly states that the evaluation was undertaken to document the need for accommodations. We therefore have an additional reason to doubt the accommodation recommendations made by the “qualified professionals” in which the ADAAA regulations place great trust.

Conclusion

In designing the final version of its regulations for the implementation of ADAAA, the DOJ consulted disability advocacy groups, as well as testing agencies, to obtain differing perspectives on the proposed regulations. This is as it should be, because a variety of stakeholders should have input on such regulations. However, in this process, the voice of research remained unheard, at least directly. This article has reviewed research showing that, on the topic of testing accommodations, the ADAAA regulations make a variety of inaccurate assumptions. These assumptions are unified by a considerable degree of trust placed in the disability determinations and accommodation decisions made by K–12 schools, diagnosticians, and testing entities, whereas empirical research suggests that this level of trust is not warranted.

Several implications can be drawn from this research. First, clinicians and special education professionals need more thorough research-informed training in testing accommodation decision making. Private clinicians who perform diagnostic evaluations, as well as special education professionals who sit on IEP teams, appear to recommend accommodations that have the possibility of either improving an applicant’s score (allowing them to perform “at their best”) or making the testing experience more comfortable. In certain contexts, these criteria for accommodation selection may actually be defensible, but they are not the criteria that follow ADAAA guidelines, and they are likely to lead to substantial overrecommendation of accommodations.

Second, independent reviews of disability documentation and accommodation requests have the potential to greatly increase the accuracy of accommodation decisions. Given the variable and haphazard processes through which disabilities are diagnosed and accommodations are provided, careful reviews of documentation and requests are warranted. Ironically, even though the DOJ’s guidance document is not especially supportive of independent reviews, those reviews are even more important under ADAAA, because any decisions about accommodations will now be given more weight when subsequent requests are made. Moreover, even if testing entities have confidence in certain qualified evaluators who are recommending accommodations, or in certain other entities (e.g., other testing agencies) that have granted accommodations in the past, a new exam may measure different skills, and so a careful review of each application is still needed. External reviewers can be especially useful to smaller testing entities, which are less likely to have full-time internal staff with relevant expertise. Admittedly, external review can increase application processing time and also costs the testing entity money, but reducing unnecessary accommodations can also save money, and guidelines are available for optimizing the use of external reviewers (Gordon, 2012).

Finally, given the research reviewed here, a more radical implication is warranted: The DOJ should consider revising the regulations for implementing ADAAA. Administrative agencies regularly revise regulations in the light of research evidence, and research findings on disability determination and accommodation decision processes accumulate over time just as new findings on environmental pollution or disease control do. If the DOJ does not revisit its regulations, it seems likely that cases will arise in which testing entities deny accommodations and courts that are presented with relevant research findings will be tempted to side with testing entities over the plaintiffs who are suing them, even when the plaintiffs cite the regulations for protection. Admittedly, courts must typically defer to executive branch bodies such as the DOJ when it comes to the implementation of laws (a practice known as the *Chevron* doctrine in administrative law; see *Pierce*, 1988). However, this

deference is not absolute, especially with regard to less formal guidelines, such as those in the DOJ's guidance document (Sunstein, 2006).

The studies reviewed in this document are just part of the literature that should affect any revision of guidelines; other literature is helpful as well. For instance, articles advocating specific research-based practices in accommodation decision making (e.g., Braden & Joyce, 2008; Hollenbeck, 2002) should be consulted, because regulations and guidance for implementing ADAAA should not contradict research-based practices without good reason. Similarly, summaries of research on the *effects* of testing accommodations (e.g., Lovett, 2010; Sireci et al., 2005) should be consulted, so that developers of regulations understand the complex consequences of accommodations that decision makers must consider. Finally, consulting articles on the use of high-stakes tests to certify competence among professionals (e.g., Melnick, 2011; Sireci & Hambleton, 2009) would remind DOJ staff that excessive proffering of accommodations could undermine the public welfare by artificially inflating the scores of examinees who lack job-relevant skills. In short, those seeking to develop or revise legal guidelines for testing accommodations should examine relevant literature so as to place themselves in the position of the testing entities making difficult decisions about accommodations, rather than only placing themselves in the position of the examinees requesting the accommodations.

These proposed implications, especially radical revision of regulations, may surprise observers who wonder why testing accommodations should generate such controversy. In fact, although they may seem like low-intensity alterations that should be uncontroversial, testing accommodations actually raise deep and difficult issues of fairness and equity. In comparison with other assessment techniques (interviews, observations, etc.), tests have a more standardized nature; they are generally administered and scored in the same way for all examinees (Geisinger, 1994). At times, examinees with disabilities will not be able to access an exam in its standardized format, making certain accommodations appropriate. But testing accommodations always come with a potential cost, that of allowing the accommodated examinee a kind of access that other examinees do not have, leading to test scores that are inappropriately inflated (Phillips, 1994). Testing accommodations are often appropriate, because this potential cost can be outweighed by the benefit of a more accurate score for the accommodated examinee. However, we should not treat the breaking of test standardization lightly, and so accommodation requests should be treated with respect but with caution as well. Unfortunately, the DOJ's regulations and guidance for implementing ADAAA ignore the need for such caution, failing to hear the voice of a considerable body of empirical research.

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